

2nd Meeting of the Blue Ribbon Panel
Manufacturing Gasoline With & Without Oxygenates:
Challenges & Timing
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Manufacturing/Supply fundamentals:

- Different kinds of gasoline [i.e., types (e.g., RFG/conventional), grades (premium/intermediate/regular), volatility grades (North/South), etc.] must be manufactured at refineries and moved to the ultimate customer while maintaining the specifications of each per Federal, State and ASTM gasoline requirements.
- Have two basic hurdles, manufacture and supply, when developing gasoline without use of MTBE:

Manufacture:

- Simplified Refinery Flow Diagram - - brief
- Replace MTBE with what? Other ethers have same odor/taste/water solubility. Alcohols are very toxic (except ethanol); and are more soluble with water than MTBE.
- MTBE has excellent fuel properties; not easy to replace.
- The only real options per the California Energy Commission (CEC) study are to either use ethanol or to use no oxygenate. Other ethers (ETBE, TAME), Tertiary-Butyl-Alcohol (TBA) or "mixed oxygenates" are not real options. Alkylate?
- Federal mandate of RFG oxygen content is a legislated obstacle that must be removed. Once rescinded, a reduction of MTBE use is expected.
- Ethanol has its own obstacles (i.e., vapor pressure impact; can't complete job at refinery; inadequate supply; facilities needed at terminals; supply logistics problems; non-fungibility of ethanol/RFG with other oxygenates/RFG during summer)
- Significant refinery modifications require up to 4 years to complete.

Supply:

- U.S. Gasoline Supply - - Illustration
- Proprietary additives are added at terminals which distinguish a brand from other brands.
- Supply systems and fungible movement of product effectively use available tankage, pipelines, barge and ship compartments to sustain the identity of today's fuel matrix, and they are not accommodating to boutique fuels.

General Guidance:

- Continued support for clean gasoline and sustain the environmental standards for RFG (i.e., VOC, NOx and Toxics).
- Support removal of the oxygen mandate from the Clean Air Act.
- National solution is far better than states crafting own unique boutique gasoline.
- Strongly support 100% compliance with Underground Storage Tank (UST) programs.
- Blue Ribbon Panel is expected and encouraged to provide guidance for a national remedy.
- Four years are required to make any significant refinery changes.